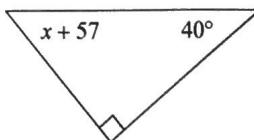
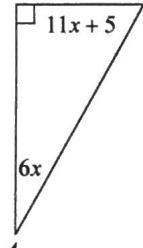


## Triangle Theorems HW

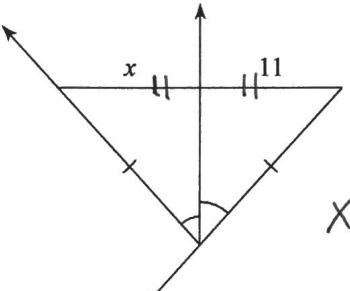
**Solve for x.**

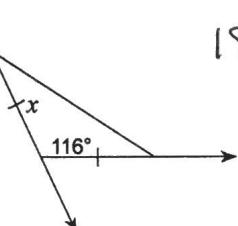
1)   $180 + x = 180$   
 $x = -7$

**Find the measure of angle A.**

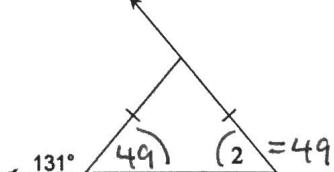
3)   $95 + 17x = 180$   
 $17x = 85$   
 $x = 5$   
 $m\angle A \text{ (6(5))} = 30$

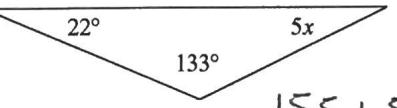
**Find the value of x.**

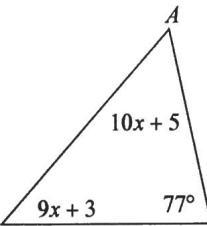
5)   $x = 11$

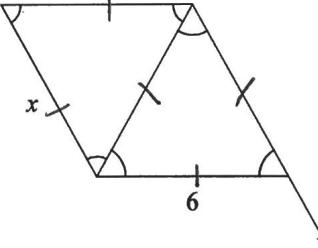
7)   $180 - 116 = \frac{64}{2}$   
 $x = 32$

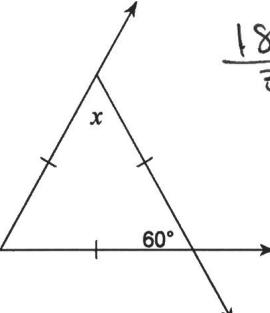
9)  $m\angle 2 = -11 + 4x$

  
 $180 - 131 = 49$   
 $49 = -11 + 4x$   
 $60 = 4x$   
 $x = 15$

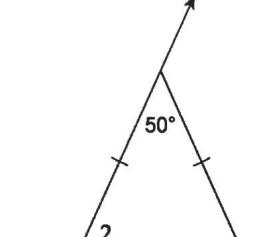
2)   $155 + 5x = 180$   
 $x = 5$

4)   $19x + 85 = 180$   
 $x = 5$

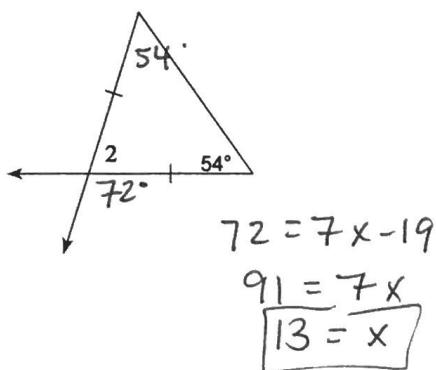
6)   $x = 6$

8)   $\frac{180}{3} = 60$   
 $x = 60^\circ$

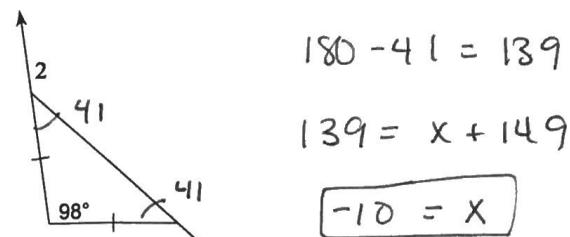
10)  $m\angle 2 = 80 + x$

  
 $180 - 50 = \frac{130}{2} = 65$   
 $65 = 80 + x$   
 $-15 = x$

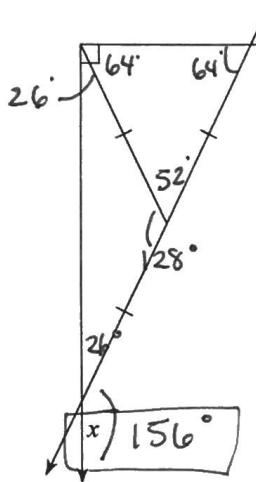
11)  $m\angle 2 = 7x - 19$



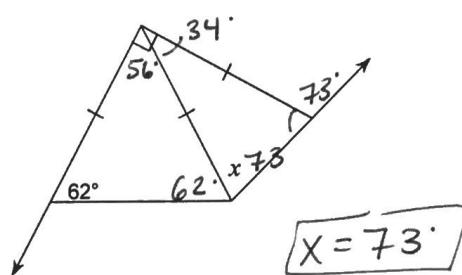
12)  $m\angle 2 = x + 149$



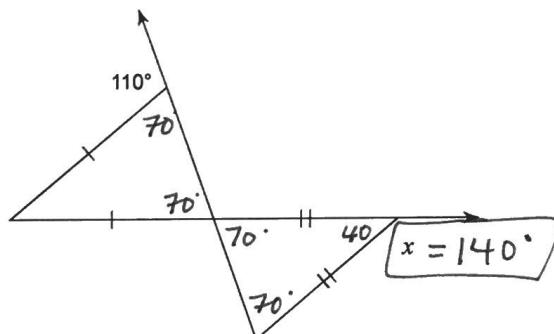
13)



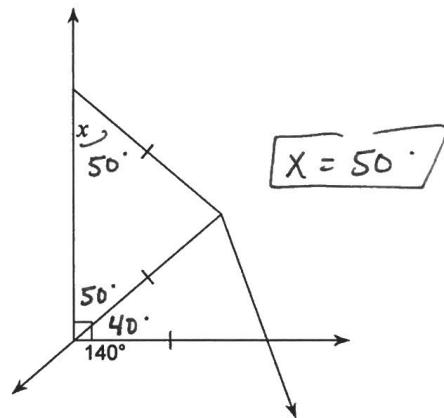
14)



15)



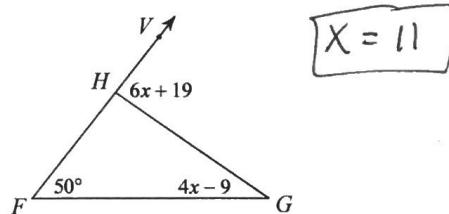
16)



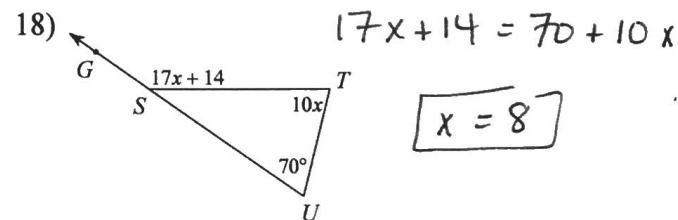
Solve for x.

$$6x + 19 = 50 + 4x - 9$$

17)

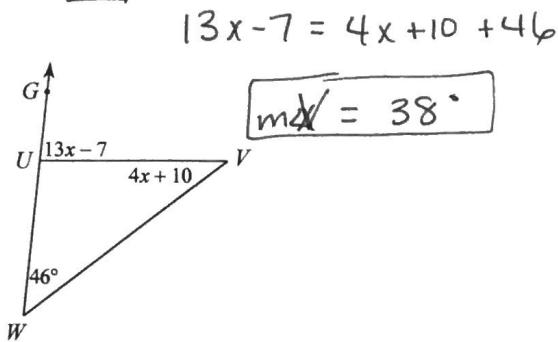


18)

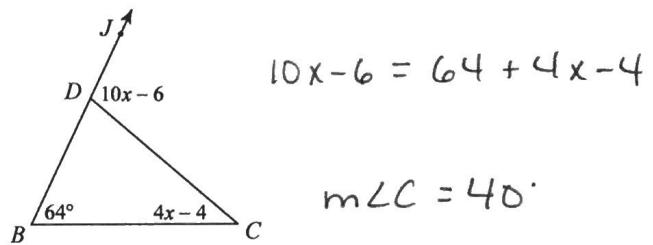


**Find the measure of the angle indicated.**

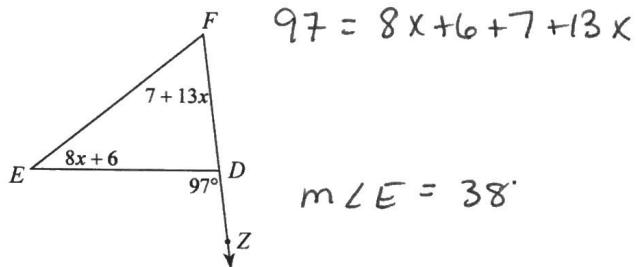
19) Find  $m\angle V$ .



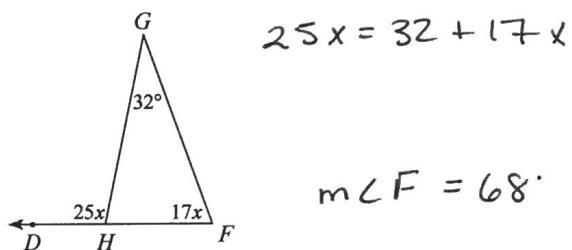
20) Find  $m\angle C$ .



21) Find  $m\angle E$ .



22) Find  $m\angle F$ .



**State if the three numbers can be the measures of the sides of a triangle.**

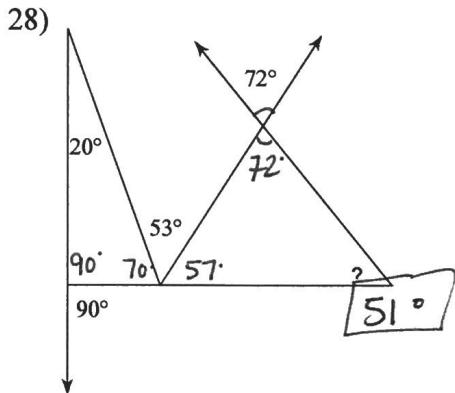
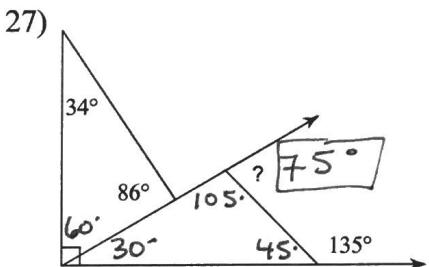
23) 13, 7, 6

24) 12, 10, 9

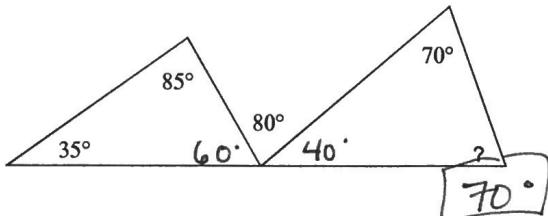
25) 19, 11, 11

26) 1, 11, 10

**Find the measure of each angle indicated.**



29)



30)

